

Guidance to Federal Agencies for Determining Baseline Water Usage

December 2, 1999

Background

Executive Order 13123 encourages Federal agencies to reduce costs and implement cost-effective water efficiency improvements at Federal facilities. The Secretary of Energy must provide guidance to assist each agency to determine a baseline of water consumption, and will establish water conservation goals for Federal agencies by June 3, 2000.

Baseline water information will be used to describe total estimated Federal water usage and monitor the impact of future water efficiency improvements. It is likely that available data is incomplete, so an important component of this process will be to assess the existing data, improve the estimation process, and ultimately to collect more complete data on water use at Federal facilities. Agencies are encouraged to focus baseline development efforts on the subset of buildings comprising the majority of water usage.

Baseline Water Usage

Agencies shall establish baseline potable water usage at facilities owned by the United States Government. The baseline year is defined as FY00 (October 1, 1999 through September 30, 2000). Data shall be reported in Million Gallons per Year (MGY). Agencies should use actual data where available, or make a best estimate where actual data are not available.

Facilities Where Actual Data Are Available

Agencies should use data from one or more of the following sources: facility meter(s), the local water/wastewater supplier(s) and/or metered well(s) and spring(s). If multiple data sources are used, care should be taken to not "double count."

Facilities Where Actual Data Are Not Available

Agencies with facilities where no actual water usage information is available should estimate water usage. If a facility has had a recent water use survey, agencies can use those results to estimate water use. Otherwise, to achieve a reasonable estimate, agencies should, at a minimum:

1. Identify the significant factors which determine water usage, such as number of beds in a hospital, number of prisoners, number of employees and visitors, production units and /or irrigated acreage;
2. Determine the numeric value for those factors;
3. Then, multiply the numeric value by water use indices to be provided by the Federal Energy Management Program. FEMP will provide water use indices for hospital beds, prisoners, employees, dwelling units, and schools. Agencies with other significant or unusual water usage should contact FEMP for assistance.

Schedule/Reporting

Agencies shall report FY00 water usage to the Department of Energy in their Fiscal Year 2000 annual energy reports. DOE shall provide a reporting format to Federal agencies by June 2000.

Federal water usage will thereafter be reported every two years beginning in 2002. Agencies will also report water conservation measures implemented and water saved on an annual basis.

It is anticipated that the total estimated Federal water usage would decrease over time, due to future implementation of water efficiency measures. DOE recognizes that some agencies may have future increases in water usage for legitimate reasons such as changes in numbers of visitors, employees, and production. In the FY 2000 report, agencies should describe those factors that would explain any future increases in water usage. These factors may be similar to those identified in the baseline estimation methodology described above.

Attachments

Attachment 1 Draft-Federal Water Use Indices

Attachment 2 Water Conversion Chart